

to catch. Because of its burrowing habits it may not be easily seen during dry season when the individuals may go deeper in the burrow and not come up frequently. Most of the specimens of this species were collected (or spotted) near about during the rainy season when the burrows get frequently inundated compelling the lizards to come up.

From the records of the species it appears that this is distributed along the coastal belt in Orissa and Andhra Pradesh.

The type collection on which Annandale (1917) based the description of the this genus seems to have been lost in the Varuna flood in 1943 when the Zoological Survey of India was temporarily shifted to Varanasi.

Material examined: 2 examples; Reg. No. 23659; Loc: Nandankanan Biological Park,

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VETERINARY SURGEON,
NANDAN KANAN BIOLOGICAL PARK,
BARANG, DIST. CUTTACK, ORISSA,
December 28, 1979.

Barang, Dist. Cuttack, Orissa; Coll.: L. N. Acharjyo; date: 2-11-1973.

Measurements: Snout to vent 12.5 mm, Tail 7.5 mm, Breadth 6.7 mm. and Snout to vent 15 mm, Tail 8.7 mm, Breadth 7.7 mm.

The blunt snout (dorsoventrally flattened) and tail (rounded at the tip) have earned the name "DEEMUNDIA" (two-headed) to this lizard locally in Orissa. It is cream-coloured with six prominent dorsal, broken up lines, between the back of head and tip of tail. Similar, but faint, spotted lines are present on the flank on both sides. The head and terminal 30 mm. of the tail tip are brown in one specimen; in the other only the head is brown and the six longitudinal spotted lines are continued upto the tip of the tail. Underside in both is cream coloured.

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17. COMMENTS ON THE FIRST RECORD OF *BOTIA* (PISCES: COBITIDAE) FROM THE WESTERN GHATS BY RAO & YAZDANI

(With a text-figure)

The only species of *Botia* we had come across in Maharashtra State was the striped loach, *Botia striata kolhapurensis*. *Botia*

striata was first described by Rao (1920) from the river Thunga, Shimoga town in Karnataka State. Kulkarni (1951) reported the

extension of its range to Kolhapur, and Kalarwar & Kelkar (1956) created a new subspecies, *B. striata kolhapurensis* for the specimens collected from this region.

From the photograph of the fish, identified by Rao & Yazdani (1977) as *Botia dayi*, we could surmise that in appearance it closely resembled *B. striata kolhapurensis*. However, in the absence of an opportunity to examine the actual specimen collected by them, this could not be definitely ascertained. In August 1979, we had the opportunity to examine the specimen in detail, while on loan from the Zoological Survey of India to the Curator, Tara-

porevala Aquarium. Our suspicion that it was *B. striata kolhapurensis* was at once confirmed.

Botia dayi has had a chequered taxonomic history. Buchanan (1822) described a new species of loach from northern Bengal and named it *Cobitis geto*. Gunther (1868) was of the opinion that it was a juvenile stage of *Botia dario* (H.B.)—a closely allied species. Day (1872) considered it as a doubtful synonym of *B. dario*. Hora (1922) considered the two as different species but subsequently, in 1932, he revised his opinion, considering it to be a young stage of *B. dario*. He raised Day's (1878) *Botia geto* from Sind to the status of a new species, naming it *Botia dayi*. Menon (1974) considered *B. dayi* Hora to be a synonym of *Botia rostrata* Gunther.

Rao & Yazdani (1977) have not described the morphological characters of their *Botia dayi*, stating only that their specimen agrees well with the description given by Hora. While Day (1878) used morphological characters, such as the number of rays on the various fins and the numbers of barbels, Hora considered the taxonomy of Indian species of *Botia* to be unsatisfactory and gave a key in which the prominent distinguishing characters were morphometric, being based mainly on the proportions of the various parts of the body and position of eyes. From his key *B. striata* can be distinguished as having its eyes almost in the posterior half of the head, whereas *B. dayi* (*B. geto* in his 1922 key) does not have the eyes situated wholly in the posterior half of the head. The fin-ray counts of the two species are as follows:—

Botia dayi (as given by Hora): D. 2/9; V. 1/6; P. 2/11-12; A. 2/5.

Botia striata (as given by C. R. N. Rao): D. 2/9-10; V. 8; P. 13-14; A. 1/6-7.

Botia striata kolhapurensis (as given by Kala-

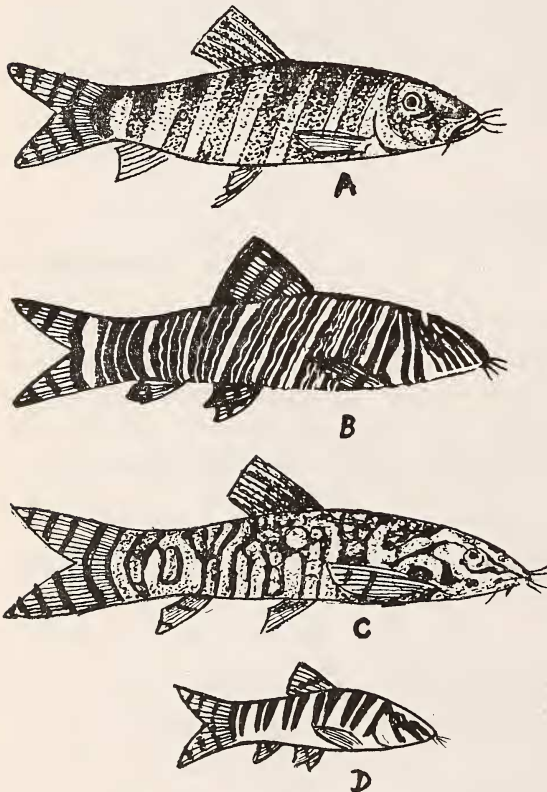


Fig. 1

A. *Botia dario*; B. *Botia striata kolhapurensis* (adult); C. *Botia dayi*; D. *Botia striata kolhapurensis* (juvenile).

war & Kelkar): D. 2/9; V. 1/7; 2/9-10; A. 2/5.

Kalawar & Kelkar (op. cit.) have separated the subspecies *kolhapurensis* from the species (s.s.) partly because of its different colour pattern; while the stripes on the body in *B. striata* meet in the mid-ventral line, in the subspecies *kolhapurensis* they stop short latero-ventrally. It may, however, be stated here that we, in the course of examination of hundreds of specimens of *B. striata kolhapurensis*, find two colour variations. In some specimens (mostly those which are lightly coloured) these stripes fail to meet in the mid-ventral line, but in other (darker) specimens, posterior to the anal fin they do meet mid-ventrally, although in the anterior portion of the body they stop short on the sides.

Juvenile specimens of *B. striata kolhapurensis* have a few broad black bands on the body. As they grow, each broad band splits up into (usually) three narrow stripes, until they reach the final body coloration of the adult with numerous narrow stripes. In the juvenile stage, therefore, *B. striata kolhapurensis* may be confused, on a cursory look, with *B. dario*, which too has a similar colour pattern of oblique dark bands. *B. dayi*, on the contrary, has a characteristic coloration, the

body being reticulated with dark bands which anastomose with one another and enclose yellowish spots of different sizes.

Rao & Yazdani have apparently overlooked, the earlier reports of Kulkarni, and of Kalawar & Kelkar. Even had their specimen been really *B. dayi*, it was not the first record of the occurrence of the cobitid genus *Botia* in the Western Ghats, as stated in the opening sentence of their note. Annandale (1919) as well as Silas (1953, 1954) did not record any *Botia* from Mahableshwar, Wai, and elsewhere in the Western Ghats, but the records by Kulkarni, and by Kalawar & Kelkar do not leave any doubt about the validity of their identification.

To summarize, the specimen of *Botia* mentioned by Rao & Yazdani (op. cit.) is not *B. dayi* but *B. striata kolhapurensis*. Secondly it is not the first record of the genus *Botia* from the Western Ghats.

ACKNOWLEDGEMENT

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18. AN INTERESTING METHOD OF FISHING IN BASTAR DISTRICT, MADHYA PRADESH

(With a text-figure)

In the course of a fish survey of Bastar District in 1978, we came across an interesting method of fishing in the River Narangi, a tributary of River Indrawati, near Kondagaon. The method essentially consists of a cast net modified to act as an under-water trap, together with a device for directing fishes towards the net. In summer the water level in the river Narangi is very low and several water pools are formed in its entire course. As the fish population is poor in these pools, a cast net is not effective. The local fishermen have, therefore, developed a system by which they obtain a fairly good catch in shallow waters, between 2 and 3

metres depth, with the aid of cast net in a modified form.

The following articles are used in this method of fishing: one cast net (mesh size $\frac{1}{2}$ cm), one float [dried shell of gourd (*Lagenaria siceraria*) known as 'tumba'] fixed at the narrow end of the net, two cords of coconut fibre, three bamboo poles about two metres long, and leaves of "chhind" (*Phoenix pusilla*—Family Palmae) tied to the cords at intervals of about 10 cm. The cord with leaves tied to it is locally called "bela".

The cast net is stretched under-water in a conical shape, rather like a bell (Fig. 1). The open mouth of the net is attached to two poles